

**TECHNICAL REVIEW AND EVALUATION FOR
OPERATING AIR QUALITY PERMIT #46895
POTTERS INDUSTRIES, INC.**

I. INTRODUCTION

This synthetic minor permit is a renewal for Operating Permit No. 27519, for the operation of a glass bead manufacturing plant located in Kingman, Mohave County, Arizona by Potters Industries, Inc.

Company Information

Facility Name: Potters Industries, Inc.

Mailing/ Facility Address: 4665 Finance Way
Kingman, AZ 86401

II. FACILITY DESCRIPTION

The primary function of the facility is to manufacture spherical glass beads by using recycled plate glass as raw material. The glass is ground and fed into a furnace and forced upwards to cool and be drawn out of the gas stream. As the glass increases in temperature, it will melt and due to the motion of the air flow will create spherical shapes. The glass spheres are collected, sized, coated, and packaged for distribution.

III. LEARNING SITES EVALUATION

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, the Department conducted an evaluation to determine if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools at the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

The Department did not identify any learning sites within two miles of the facility.

IV. EMISSIONS

Table 1: Summary of Facility-wide Potential Emissions

Pollutant	PTE (ton/year)
NO _x	18.35
SO ₂	0.11
PM ₁₀	49.59
PM	62.85
CO	15.42
VOC	2.25

V. COMPLIANCE HISTORY

There are no air quality cases and/or violations associated with this facility at this time.

VI. APPLICABLE REGULATIONS

The Permittee has identified the applicable regulations that apply to each unit in its permit application. The following table summarizes the findings of the Department with respect to the regulations that are applicable to each emissions unit. Previous permit conditions are discussed under Section VII of this technical review document.

Unit ID	Year of Manufacture	Control Equipment	Applicable Regulations	Verification
Glass Bead Handling and Processing	1989-1995	Baghouses	R18-2-702.B R18-2-702.C R18-2-730.A R18-2-730.D R18-2-730.F R18-2-730.G	General Provisions. Standards of Performance for Unclassified Sources. National Emissions for Hazardous Pollutants: Standards of Performance for Glass Manufacturing Plants: Subpart CC is not applicable, because the facility does not operate a glass melting furnace to produce molten glass
Fugitive Emissions Requirements	N/A	N/A	R18-2-604 R18-2-605 R18-2-606 R18-2-607 R18-2-614 R18-2-702	Applicable to fugitive dust sources at the facility.
Mobile Sources	N/A	N/A	R18-2-801 R18-2-802 R18-2-804	Emissions from Mobile Sources
Other Periodic Activities	N/A	N/A	R18-2-702 R18-2-726 R18-2-727	General Provisions; Standards and Performance for Sand Blasting Operations; Standards of Performance for Spray Painting Operations

VII. PREVIOUS PERMITS AND CONDITIONS

A. Previous Permits

The following table lists the previous permits that have been issued to Potters Industries:

Previous Permits

Date Permit Issued	Permit #	Application Basis
8/18/2003	27519	Class II Operating Permit

B. Previous Permit Conditions

The following are discussions on the previous permit that has been issued to the source.

CLASS II, NON-TITLE V OPERATING PERMIT NO. 27519

This operating permit was issued to Potters Industries, Inc. on August 18, 2003, to operate a glass bead manufacturing facility.

Permit #27519 References	Determination				Comments
	Revised	Keep	Delete	Stream-line	
Attachment A	X				General provisions - revised to represent most recent language
Attachment B.I	X				Facility Wide Limitations have been revised to include operating limitations, monitoring and recordkeeping, and reporting requirements
Attachment B.II		X			Glass Bead Handling and Processing requirements from A.A.C. R18-2-730
Attachment B.V		X			Fugitive Emission Requirements
Attachment B.VI		X			Mobile Source Requirements
Attachment B.VII		X			Other Periodic Activities
Attachment C		X			No change to equipment

VIII. MONITORING AND TESTING REQUIREMENTS**A. General**

1. Along with the annual compliance certification, the Permittee is required to submit reports of all recordkeeping, monitoring and maintenance required by the permit.
2. The Permittee is required to maintain, on-site, records of the manufacturer's specifications or an Operation and Maintenance Plan for all equipment listed in the permit.

B. Glass Bead Handling and Processing

1. A certified EPA Reference Method 9 observer is required to conduct a monthly survey of visible emissions emanating from the glass bead handling and processing systems. If the opacity of the emissions observed appears to exceed the standard, the observer must conduct a certified EPA Reference Method 9 observation. The Permittee must keep records of the initial survey and any EPA Reference Method 9 observations performed. These records must include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation.
2. On a daily basis, the Permittee must record the pressure drop across the baghouses to demonstrate that the readings are within ranges specified by the manufacturer.
3. Within 180 of issuance of the permit and annually thereafter, the Permittee must conduct a black light inspection on the baghouses in an effort to detect broken or leaking bags. If broken or leaking bags are detected, the Permittee must repair or replace the bags. Upon completion of the inspection, the Permittee must record the name of the inspector, the date, the time, and the results of the inspection and the repairs performed to address any problems detected.
4. The Permittee must conduct a performance test during the first year of the permit term on Baghouse B, Baghouse C, and Baghouse G for particulate matter to show compliance with the limit specified in Condition II.C.b of the permit. The Permittee must use EPA Reference Method 5 and 202 for conducting the performance test.
5. The Permittee must conduct a performance test during the last year of the permit term on Baghouse B, Baghouse C, Baghouse G, and Baghouse D for particulate matter to show compliance with the limit specified in Condition II.C.b of the permit. The Permittee must use EPA Reference Method 5 and 202 for conducting the performance test.

C. Fugitive Emissions

The Permittee is required to keep record of the dates on which any of the fugitive dust control measures contained in Attachment "B" are employed.

1. The Permittee is required to show compliance with the opacity standards in Attachment "B" by having a Method 9 certified observer perform a monthly survey of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission source and submit excess emission reports when necessary.

IX. LIST OF ABBREVIATIONS

CO.....	Carbon Monoxide
NO _x	Nitrogen Oxides
PM.....	Particulate Matter
PTE	Potential-to-Emit
SO ₂	Sulfur Dioxide
VOC.....	Volatile Organic Compound
EPA	Environmental Protection Agency
N/A	Not Applicable